

What is claimed is:

1 1. A position sensor for an electronic device,
2 comprising:

3 a housing;

4 a first conductor disposed at the bottom of the
5 housing;

6 a plurality of second conductors engaged in the
7 housing; and

8 a connector movably disposed in the housing and
9 contacting the first conductor;

10 wherein the inner periphery of the housing limits
11 the movement of the connector so that the first
12 conductor electrically connects to only one of
13 the second conductors.

1 2. The position sensor as claimed in claim 1,
2 wherein the periphery of the housing comprises a
3 plurality of engaging portions for engaging the second
4 conductors thereof.

1 3. The position sensor as claimed in claim 2,
2 wherein the connector comprises a plurality of
3 protrusions corresponding to the engaging portions for
4 contacting the second conductors.

1 4. The position sensor as claimed in claim 3,
2 wherein the connector contacts each of the second
3 conductors with the protrusions by moving in the housing.

1 5. The position sensor as claimed in claim 1,
2 wherein the connector comprises a plurality of convexes

3 on a bottom thereof to contact the first conductor and
4 reduce friction therebetween.

1 6. The position sensor as claimed in claim 1,
2 wherein the first conductor is a metal sheet.

1 7. The position sensor as claimed in claim 1,
2 wherein the housing is made of plastic.

1 8. The position sensor as claimed in claim 1,
2 wherein the first conductor is made of non-ferric metal.

1 9. The position sensor as claimed in claim 1,
2 wherein the second conductor is made of ferric metal.

1 10. The position sensor as claimed in claim 1,
2 wherein the connector is made of ferromagnetic metal to
3 ensure contact between the second conductor and the
4 connector.

1 11. The position sensor as claimed in claim 1,
2 wherein the second conductors are resistors of different
3 values.

1 12. The position sensor as claimed in claim 1,
2 wherein the second conductors are signal sources sending
3 different signals.

1 13. An electronic device, comprising:
2 a circuit board;
3 a housing comprising a plurality of engaging
4 portions on the periphery thereof;
5 a first conductive element disposed between the
6 housing and the circuit board;

7 a plurality of second conductive elements disposed
8 on the circuit board with one end thereof and
9 engaging the engaging portion with the other
10 end; and
11 a connector movably disposed in the housing and
12 contacting the first conductive element;
13 wherein the inner periphery of the housing limits
14 the movement of the connector so that the first
15 conductive element electrically connects to
16 only one of the second conductive elements, and
17 thus the position of the electronic device is
18 detected.

1 14. The electronic device as claimed in claim 13,
2 wherein the connector comprises a plurality of
3 protrusions corresponding to the engaging portions for
4 contacting the second conductive elements.

1 15. The electronic device as claimed in claim 14,
2 wherein the connector contacts each of the second
3 conductive elements with the protrusions by moving in the
4 housing.

1 16. The electronic device as claimed in claim 13,
2 wherein the connector comprises a plurality of convexes
3 on the bottom thereof to contact the first conductive
4 element and reduce friction therebetween.